V.—On the Breeding of the South African Black Duck (Anas sparsa). By F. E. BLAAUW, M.B.O.U.

(Plate I.)

ANAS SPARSA is rather a peculiar Duck, and it has a charm of its own, owing to the mystery which surrounds it. When I was in South Africa in the spring of 1914 I only once succeeded in seeing this Duck in its native haunts. I was following the course of a mountain-stream in the Zwarte bergen in the Oudtshoorn district on my way to the Cango caves, and in one of the wildest parts I flushed a Duck of this species. The bird only flew away a short distance, and then kept anxiously looking back at me without going farther away, and this made me think that she had a family hidden somewhere near me.

Although I tried very hard to find the supposed young ones, I did not succeed, probably owing to the banks being full of rank vegetation, in which any number of chicks might safely hide away.

Later on, in Natal, I chanced to come across a pair of these Ducks which were kept in confinement, and which I brought safely home to Holland.

The *male* of this species is larger than the female, and the grey body-colour is lighter in shade, whilst in the female it is nearly black.

The result is that the white spots, which look much like snow-flakes, are more conspicuous in the female.

The wing-bar is very beautiful in both sexes, being of a metallic blue which changes into purple and green, and is edged by a white bar and velvety black.

The bill in both sexes is blue, with a black saddle-mark on the upper mandible which does not quite reach to the head. The nail is black. There is no yellow anywhere on the bill. The legs and toes are orange, clearest in the male. The webs are dusky. These birds have not the voice of the typical members of the genus *Anas* and have quite different manners. I think that they are nearer in these respects to *Chaulelasmus* than to *Anas*.

After having safely brought home my pair of birds, I put them on a small piece of ornamental water on which were several other exotic water-fowl, and they were soon quite at home.

In spring 1915 the birds began to be very quarrelsome with the other Ducks, and so I took them away and gave them a small pond to themselves, hoping that they would breed. It appeared, however, that their season was past, for they began to moult and nothing came of it.

In the spring of 1916, towards the end of April, the female began to lay in a small box placed among the reeds over the water.

Six eggs were laid, and an abundant layer of down was plucked out of the bird's own breast to cover them. The eggs were rather large for the size of the bird, rather elongated, and of a pale yellow colour with much gloss.

As I was afraid that something might happen to the eggs or chicks if I left them in charge of the old birds, I took them away and put them under a bantam hen, giving the Black Duck some eggs of the Australian Wild Duck instead.

On the twenty-fifth day of incubation the six eggs under the hen hatched. This was on the 29th of May.

The chicks were coloured as follows :---

Upperside and band round the breast, which does not quite meet in front, black. Five or six yellow spots on each side of the body. Sides of the head yellow, with a black line through the eye and a second one a little lower down. Underside white, slightly tinged with yellow. Bill black. Legs and toes pale dusky yellow in front, webs and hindpart of legs dusky.

The little chicks were very active from the first, and fed on ants' eggs and any insect they could catch.

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1917.] of the South African Black Duck.

The old female continued to incubate the Australian Wild Duck eggs, and each time she left them in search of food the male kept her company as long as she was about.

A few days before the eggs hatched the male moulted his flight-feathers, and from that moment kept to himself, and only rejoined the female with her foster-children when the moult was completed.

At ten days old the bills of the Black Duck chicks had become bluish-lead colour, and the birds had grown to more than double the size they were when just hatched, and looked sleek and glossy.

At the age of about 24 days the first feathers began to appear—the tail-feathers first and then the shoulderfeathers.

When fully feathered at about two and a half months they were very similar to the adults, but more brownish and the whole underside silvery white. Upperside, head and neck excepted, but including tail-coverts, with a number of buff spots or edges to the feathers. No white spots. Blue wingbar with its white and black edgings present, but duller in colour. Upper mandible blue, nail black. Underside of under mandible flesh-colour.

At about seven weeks the black saddle-mark on the upper mandible begins to appear, but it is only visible under eertain lights when the bill is seen sideways, and is invisible when the bill is seen in front. As the birds get older the black mark becomes more and more plain, and at the age of about nine weeks it is always visible, although not so black as in adult birds. Towards the end of August some of the buff spots of the upperside began to turn into white without a moult, and about the middle of September nearly all the spots had become white. Towards the end of September the birds began to moult, and towards the end of October had acquired the dress of the adults.

Anas sparsa is a very expert diver, diving with as much ease and readiness as a true Diving-Duck to get food from the bottom of the water.

